# API Bank Specification Document - Banking system

**Version: 3.1.0**

**Base URL: https://www.openbankproject.com/solutions/sandbox/**

# MANDATORY TO PUT IN HEADER

## Authentication Direct Login:

POST /my/logins/direct HTTP/1.1
Host: api.openbankproject.com
Accept: application/json
Authorization: DirectLogin username="username", password="password", consumer_key="yourConsumerKey"

## Verify Authentication:

POST /obp/v3.1.0/users/current HTTP/1.1
Host: YOUR-HOST
Accept: application/json
Authorization: DirectLogin token="abc123"

# USER MANAGEMENT ENDPOINTS

1. **Create User**
   POST /users
2. **Get Current User Info**
   GET /users/current

# ACCOUNT USER API

**Resources:**

**1. Account**
**- Create Account**
**PUT /banks/{BANK_ID}/accounts/{ACCOUNT_ID}**
**Request sample:**
```
{
 "account_routing": {
  "scheme": "AccountNumber",
  "address": "4930396"
 },
```

```
  "branch_id": "1234",
  "label": "Label",
  "balance": {
    "currency": "EUR",
    "amount": "10"
  },
  "user_id": "9ca9a7e4-6d02-40e3-a129-0b2bf89de9b1",
  "type": "CURRENT"
}
```

**2. Users**
**- Create User**
**POST/users**
**Request sample:**
```
{
  "first_name": "String",
  "email": "String",
  "username": "String",
  "last_name": "String",
  "password": "String"
}
```

**Response sample:**
```
{
  "provider": "OBP",
  "email": "eveline@example.com",
  "username": "robert.x.0.gh",
  "provider_id": "OBP",
  "user_id": "9ca9a7e4-6d02-40e3-a129-0b2bf89de9b1",
  "entitlements": {
    "list": [
      {
        "entitlement_id": "6fb17583-1e49-4435-bb74-a14fe0996723",
        "role_name": "CanQueryOtherUser",
        "bank_id": "GENODEM1GLS"
      }
    ]
  }
}
```

**3. User Info**
**- Get user information**
**GET/users/current**

**Response sample: {**
```
      {
        "provider": "OBP",
```

```
      "email": "eveline@example.com",
      "username": "robert.x.0.gh",
      "provider_id": "OBP",
      "user_id": "9ca9a7e4-6d02-40e3-a129-0b2bf89de9b1",
      "entitlements": {
       "list": [
         {
           "entitlement_id": "6fb17583-1e49-4435-bb74-a14fe0996723",
           "role_name": "CanQueryOtherUser",
           "bank_id": "GENODEM1GLS"
         }
       ]
      }
     }
```

**4. Create a Bank Account**
**- Creates a new bank account for the user**
**PUT/banks/{BANK_ID}/accounts/{ACCOUNT_ID}**

**Request sample:**
```
         {
           "account_routing": {
             "scheme": "AccountNumber",
             "address": "4930396"
           },
           "branch_id": "1234",
           "label": "Label",
           "balance": {
             "currency": "EUR",
             "amount": "10"
           },
           "user_id": "9ca9a7e4-6d02-40e3-a129-0b2bf89de9b1",
           "type": "CURRENT"
         }
```

**Response sample:**
```
{
 "account_routing": {
   "scheme": "AccountNumber",
   "address": "4930396"
 },
 "account_attributes": [
  {
    "name": "OVERDRAFT_START_DATE",
    "account_attribute_id": "613c83ea-80f9-4560-8404-b9cd4ec42a7f",
    "product_code": "saving1",
```

```
    "type": "DATE_WITH_DAY",
    "value": "2012-04-23"
  }
],
"branch_id": "DERBY6",
"label": "My Account",
"balance": {
  "currency": "EUR",
  "amount": "10"
},
"user_id": "9ca9a7e4-6d02-40e3-a129-0b2bf89de9b1",
"type": "AC"
}
```

**5.  View User Account**
**- Lists accounts accessible to the current user**
**GET/banks/my/accounts**

**Response sample:**
```
{
  "accounts": [
   {
     "id": "efc6cdea-6b4e-4b3b-a53a-3f3d9a12f58b",
     "label": "My Main Account",
     "bank_id": "rbs",
     "account_routings": [
      {
        "scheme": "OBP",
        "address": "efc6cdea-6b4e-4b3b-a53a-3f3d9a12f58b"
      }
     ],
     "views_available": [
      {
        "id": "owner",
        "short_name": "Owner View",
        "is_public": false
      }
     ],
     "bank_routings": [
      {
        "scheme": "OBP",
        "address": "rbs"
      }
     ]
   }
  ]
}
```

**6. Get account transaction (Full)**
**- Return transaction list of the account**
**GET/banks/{BANK_ID}/accounts/{ACCOUNT_ID}/{VIEW_ID}/transactions**

**Response sample:**
```
{
  "transactions": [
   {
     "this_account": {
      "id": "String",
      "bank_routing": {
        "scheme": "Bank_ID",
        "address": "gh.29.uk"
      },
      "account_routings": [
       {
         "scheme": "AccountNumber",
         "address": "4930396"
       }
      ],
      "holders": [
       {
         "name": "OBP",
         "is_alias": "true"
       }
      ]
     },
     "id": "String",
     "details": {
      "new_balance": {
        "currency": "EUR",
        "amount": "10"
      },
      "description": "this is for family",
      "completed": "Tue Sep 19 00:00:00 UTC 2017",
      "type": "AC",
      "value": {
        "currency": "EUR",
        "amount": "10"
      },
      "posted": "Tue Sep 19 00:00:00 UTC 2017"
     },
     "metadata": {
      "narrative": "NONE",
      "tags": [
       {
```

```json
      "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
      "value": "OBP",
      "date": "Tue Sep 19 00:00:00 UTC 2017",
      "user": {
        "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
        "provider": "OBP",
        "display_name": "OBP"
      }
    }
  ],
  "where": {
    "latitude": "1.231",
    "longitude": "1.231",
    "date": "Tue Sep 19 00:00:00 UTC 2017",
    "user": {
      "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
      "provider": "OBP",
      "display_name": "OBP"
    }
  },
  "images": [
    {
      "URL": "www.openbankproject.com",
      "label": "NONE",
      "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
      "date": "Tue Sep 19 00:00:00 UTC 2017",
      "user": {
        "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
        "provider": "OBP",
        "display_name": "OBP"
      }
    }
  ],
  "comments": [
    {
      "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
      "value": "OBP",
      "date": "Tue Sep 19 00:00:00 UTC 2017",
      "user": {
        "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
        "provider": "OBP",
        "display_name": "OBP"
      }
    }
  ]
},
"other_account": {
```

```json
      "account_routings": [
       {
         "scheme": "AccountNumber",
         "address": "4930396"
       }
      ],
      "holder": {
       "name": "OBP",
       "is_alias": "true"
      },
      "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
      "metadata": {
       "public_alias": "NONE",
       "image_URL": "www.openbankproject.com",
       "physical_location": {
         "latitude": "1.231",
         "longitude": "1.231",
         "date": "Tue Sep 19 00:00:00 UTC 2017",
         "user": {
           "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
           "provider": "OBP",
           "display_name": "OBP"
         }
       },
       "private_alias": "NONE",
       "URL": "www.openbankproject.com",
       "more_info": "www.openbankproject.com",
       "corporate_location": {
         "latitude": "1.231",
         "longitude": "1.231",
         "date": "Tue Sep 19 00:00:00 UTC 2017",
         "user": {
           "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
           "provider": "OBP",
           "display_name": "OBP"
         }
       },
       "open_corporates_URL": "www.openbankproject.com"
      },
      "bank_routing": {
       "scheme": "Bank_ID",
       "address": "gh.29.uk"
      }
     }
    }
   ]
  }
```

**7. Transaction Request**
**Deposit Amount**
**POST/banks/{BANK_ID}/accounts/ACCOUNT_ID}/{VIEW_ID}/transaction-requests**

**Response sample:**

```
{
 "to": {
  "bank_id": "bank-x-gh",
  "account_id": "account-y-gh
 },
 "value": {
  "currency": "PHP",
  "amount": "1000.00"
 },
 "description": "Deposit to account"
}
```

**8. Transaction Request**
**Withdraw Amount**
**POST/banks/{BANK_ID}/accounts/ACCOUNT_ID}owner/transaction-request-types/{transaction_request_type}/transaction-requests**

**Response sample:**

```
{
 "to": {
  "bank_id": "bank-x-gh",
  "account_id": "account-z-gh"
 },
 "value": {
  "currency": "PHP",
  "amount": "500.00"
 },
 "description": "Withdrawal from account"
}
```

**9. Update Account**
**Update Account**
**PUT/banks/{BANK_ID}/accounts/{ACCOUNT_ID}/products/PRODUCT_CODE/attributes/ACCOUNT_ATTRIBUTE_ID**

**Request sample:**

```
{
 "name": "OVERDRAFT_START_DATE",
 "type": "DATE_WITH_DAY",
 "value": "2012-04-23"
```

```
    }
```

**Response sample:**
```
    {
      "name": "OVERDRAFT_START_DATE",
      "account_attribute_id": "613c83ea-80f9-4560-8404-b9cd4ec42a7f",
      "product_code": "saving1",
      "type": "DATE_WITH_DAY",
      "value": "2012-04-23"
    }
```

# ACCOUNT TELLER API

**1. Get All Bank Accounts**
- **Return the list of accounts in containing private views of the user**
**GET/my/accounts**

**Response samples:**
```
    {
      "accounts": [
       {
         "account_routings": [
          {
            "scheme": "AccountNumber",
            "address": "4930396"
          }
         ],
         "label": "String",
         "account_type": "330",
         "bank_id": "GENODEM1GLS",
         "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
         "views": [
          {
            "id": "owner",
            "short_name": "Owner",
            "description": "This view is for the owner for the account.",
            "is_public": "false"
          }
         ]
        }
       ]
      }
```

**2. Access Individual Account**
- **Information return specified in account ID**

**GET/banks/{BANK_ID}/accounts/{ACCOUNT_ID}/views/{VIEW_ID}/account**

**Response sample:**
```
{
  "id": "9876abcd-1234-4567-89ab-654321abcdef",
  "label": "Student Savings",
  "bank_id": "rbs",
  "number": "11223344",
  "owners": [
   {
     "id": "user-123",
     "display_name": "Chai T."
   }
  ],
  "type": "SAVINGS",
  "balance": {
   "currency": "PHP",
   "amount": "2500.00"
  },
  "IBAN": "GB33BUKB20201555555555",
  "swift_bic": "BUKBGB22",
  "account_routings": [
   {
     "scheme": "OBP",
     "address": "9876abcd-1234-4567-89ab-654321abcdef"
   }
  ],
  "views_available": [
   {
     "id": "owner",
     "short_name": "Owner View",
     "is_public": false
   }
  ],
  "branch_id": "central",
  "account_attributes": []
}
```

3.  **Get account transaction (Full)**
- **Return transaction list of the account**
**GET/banks/{BANK_ID}/accounts/{ACCOUNT_ID}/{VIEW_ID}/transactions**

**Response sample:**
```
{
  "transactions": [
   {
     "this_account": {
```

```
  "id": "String",
  "bank_routing": {
   "scheme": "Bank_ID",
   "address": "gh.29.uk"
  },
  "account_routings": [
   {
    "scheme": "AccountNumber",
    "address": "4930396"
   }
  ],
  "holders": [
   {
    "name": "OBP",
    "is_alias": "true"
   }
  ]
 },
 "id": "String",
 "details": {
  "new_balance": {
   "currency": "EUR",
   "amount": "10"
  },
  "description": "this is for family",
  "completed": "Tue Sep 19 00:00:00 UTC 2017",
  "type": "AC",
  "value": {
   "currency": "EUR",
   "amount": "10"
  },
  "posted": "Tue Sep 19 00:00:00 UTC 2017"
 },
 "metadata": {
  "narrative": "NONE",
  "tags": [
   {
    "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
    "value": "OBP",
    "date": "Tue Sep 19 00:00:00 UTC 2017",
    "user": {
     "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
     "provider": "OBP",
     "display_name": "OBP"
    }
   }
  ],
```

```
      "where": {
        "latitude": "1.231",
        "longitude": "1.231",
        "date": "Tue Sep 19 00:00:00 UTC 2017",
        "user": {
          "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
          "provider": "OBP",
          "display_name": "OBP"
        }
      },
      "images": [
        {
          "URL": "www.openbankproject.com",
          "label": "NONE",
          "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
          "date": "Tue Sep 19 00:00:00 UTC 2017",
          "user": {
            "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
            "provider": "OBP",
            "display_name": "OBP"
          }
        }
      ],
      "comments": [
        {
          "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
          "value": "OBP",
          "date": "Tue Sep 19 00:00:00 UTC 2017",
          "user": {
            "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
            "provider": "OBP",
            "display_name": "OBP"
          }
        }
      ]
    },
    "other_account": {
      "account_routings": [
        {
          "scheme": "AccountNumber",
          "address": "4930396"
        }
      ],
      "holder": {
        "name": "OBP",
        "is_alias": "true"
      },
```

```
        "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
        "metadata": {
         "public_alias": "NONE",
          "image_URL": "www.openbankproject.com",
          "physical_location": {
           "latitude": "1.231",
           "longitude": "1.231",
           "date": "Tue Sep 19 00:00:00 UTC 2017",
           "user": {
             "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
             "provider": "OBP",
             "display_name": "OBP"
           }
          },
          "private_alias": "NONE",
          "URL": "www.openbankproject.com",
          "more_info": "www.openbankproject.com",
          "corporate_location": {
           "latitude": "1.231",
           "longitude": "1.231",
           "date": "Tue Sep 19 00:00:00 UTC 2017",
           "user": {
             "id": "5995d6a2-01b3-423c-a173-5481df49bdaf",
             "provider": "OBP",
             "display_name": "OBP"
           }
          },
          "open_corporates_URL": "www.openbankproject.com"
        },
        "bank_routing": {
         "scheme": "Bank_ID",
         "address": "gh.29.uk"
        }
       }
      }
     }
    ]
   }
  }
```

**4. Transaction Request**

**Deposit Amount**

**POST/banks/{BANK_ID}/accounts/ACCOUNT_ID}/{VIEW_ID}/transaction-requests**

**Response sample:**
```
   {
    "to": {
     "bank_id": "bank-x-gh",
     "account_id": "account-y-gh
    },
```

```
  "value": {
    "currency": "PHP",
    "amount": "1000.00"
  },
  "description": "Deposit to account"
}
```

### 5. Transaction Request
**Withdraw Amount**
**POST/banks/{BANK_ID}/accounts/ACCOUNT_ID}owner/transaction-request-types/{transaction_request_type}/transaction-requests**

**Response sample:**
```
{
  "to": {
    "bank_id": "bank-x-gh",
    "account_id": "account-z-gh"
  },
  "value": {
    "currency": "PHP",
    "amount": "500.00"
  },
  "description": "Withdrawal from account"
}
```

### 6. Close Account
**Close the specified bank account**
**DELETE /banks/{BANK_ID}/accounts/{ACCOUNT_ID}/close**

**Request sample:**
```
{
  "closing_reason": "Customer request",
  "callback_url": "https://example.com/account-closed-callback"
}
```

**Response sample:**
```
{
  "id": "9876abcd-1234-4567-89ab-654321abcdef",
  "label": "Student Savings",
  "bank_id": "rbs",
  "status": "CLOSED",
  "closed_at": "Thu May 01 14:32:10 UTC 2025",
  "closing_reason": "Customer request",
  "message": "Account successfully closed"
}
```

# RESOURCES:

**APIS: https://open-bank-project.readthedocs.io/en/latest/api.html#operation/OBPv3.0.0-getTransactionsForBankAccount**

**BASE URL:**https://www.openbankproject.com/solutions/sandbox/